

REMARKS

In accordance with the foregoing, claims 1-24 are pending and under consideration.

REJECTION UNDER 35 U.S.C. § 102:

In items 3-4, on pages 3-4 of the Action, claims 1-6 and 8-12 were rejected under 35 USC 102(e) as being anticipated by Stayt, Jr., et al. (U.S. Patent No. 6,389,046) ("Stayt"). This rejection is traversed and reconsideration is requested.

Contrary to the assertions made in the Office Action, Stayt fails to teach or suggest, "means for compensating the temperature control conditions for said laser diodes other than the reference laser diode, according to a change in temperature control condition for said reference laser diode, wherein the reference laser diode is operated at temperatures lower than or equal to an ordinary temperature," as recited in independent claim 1. In Stayt, within an array of lasers 110, at least one of the lasers, known hereafter as a dedicated element of the array, is **a control laser element 150 which has an output 160 representative of the output of the entire array 130**. Emphasis added. See column 5, lines 30-58 of Stayt.

According to the Office Action, the control laser element 150 corresponds to the reference laser diode recited in independent claim 1. However, the control laser element 150, rather than compensating the temperature control conditions for the laser diodes other than the reference laser diode and rather than using a change in a temperature control condition of the control laser element 150, the output 160 of the control laser element 150 is used as a representation of the output of the entire array 130. Specifically, the control laser element 150 is preferably fabricated to track and generate an output light source 160 representative of the power and wavelength of the entire array.

Further, the control laser element 150 outputs a light source 160 at a predetermined power and wavelength. The temperature of the control laser element 150 is monitored at predetermined intervals through the temperature sensor 190. However, Stayt is silent as to teaching or suggesting that the control laser element 150 "is operated at temperatures lower than or equal to an ordinary temperature," as recited in independent claim 1. Nothing in columns 6, 7, or 8 of Stayt is there a teaching or suggestion of such claimed feature recited in independent claim 1.

Independent claim 9 recites, "means for compensating the temperature control

conditions for said laser diodes other than the reference laser diode, according to a change in temperature control condition for said reference laser diode wherein the reference laser diode is operated at temperatures lower than or equal to an ordinary temperature.” The arguments provided above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claim 9 and related dependent claims.

It is respectfully requested that independent claims 1 and 9 and related dependent claims be allowed.

In item 5, on pages 4-6 of the Office Action, claims 1-12 were rejected under 35 USC 102(e) as being anticipated by Volz et al. (U.S. Patent No. 6,501,773) (“Volz”). This rejection is traversed and reconsideration is requested.

Applicants respectfully note that in the Office Action, the recitations in the claims that refer to the reference laser diode were not considered. In an anticipatory rejection, all claimed features must be shown in the prior art. One cannot pick and choose claimed features to prove anticipation.

Volz describes a plurality of lasers 102 configured to provide light beams 104, 106 of different wavelengths. See column 3, lines 1-17. Each laser may be individually controlled to laser at a wavelength different from other lasers. A switch 300 is an optical switch configured to sequentially pass the tapped beams from the lasers one at a time. See column 4, lines 30-37. The laser power control servo system 800, shown in FIG. 8A, monitors the power being generated by the laser 802. See column 6, lines 37-67. The system 800 utilizes the signal derived from the Power Detector Photo Diode 804. The closed loop control circuit 808 maintains the power output of the laser 802 at the reference value demanded by the system DSP 810. However, nothing in Volz teaches or suggests that one of the lasers 102 “is operated at temperatures lower than or equal to an ordinary temperature,” as recited in independent claim 1. Further, Volz is silent as to teaching or suggesting, “means for compensating the temperature control conditions for said laser diodes **other than the reference laser diode**, according to a change in temperature control condition **for said reference laser diode**,” emphasis added, as recited in independent claim 1.

Independent claim 9 recites, “means for compensating the temperature control conditions for said laser diodes other than the reference laser diode, according to a change in temperature control condition for said reference laser diode wherein the reference laser diode is operated at temperatures lower than or equal to an ordinary temperature.” The arguments

provided above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claim 9 and related dependent claims.

It is respectfully requested that independent claims 1 and 9 and related dependent claims be allowed.

In items 6-7, on page 6 of the Office Action, the Examiner rejected claim 7 under 35 USC § 103(a) as being unpatentable over Stayt. This rejection is traversed and reconsideration is requested.

Because dependent claim 7 depends from independent claim 1, Stayt must teach all the claimed features of independent claim 1. The description of Stayt and arguments previously presented to support the patentability of independent claim 1 are incorporated herein.

It is respectfully requested that independent claim 1 and related dependent claim 7 be allowed.

In item 8, on pages 6-7 of the Action, the Examiner rejected claims 13-20 under 35 USC 103(a) as being unpatentable over Stayt and further in view of Eda et al. (U.S. Patent No. 5,438,579) ("Eda"). This rejection is traversed and reconsideration is requested.

As previously set forth, Stayt fails to teach or suggest, "wherein the reference laser diode is operated at temperatures lower than or equal to an ordinary temperature," as recited in independent claim 1 and as recited in independent claims 13 and 18. According to Stayt, a temperature of the control laser element 150 is monitored at predetermined intervals through a temperature sensor 190. Eda, in turn, describes **an LD temperature sensor 40** for detecting temperature **near LD 32** and **an ambient temperature sensor 42** to detect an ambient temperature **around LD 32**. Emphasis added. See column 7, lines 25-29.

Applicants respectfully assert that the Office Action fails to show that a combination of the cited references would describe, "a first temperature sensor provided in the vicinity of said plurality of laser diodes; a second temperature sensor provided **at a position becoming lower in temperature than a position where said first temperature sensor is provided** when driving said plurality of laser diodes," emphasis added, as recited in independent claims 13 and 18. Nothing in Stayt and Eda would teach or suggest that the LD temperature sensor 40 or that the ambient temperature sensor 42 is at "**at a position becoming lower in temperature than a position wh re said first temperature sensor is provided** when driving said plurality of laser diodes," emphasis added, as recited in independent claims 13 and 18. Rather, the temperatures

detected correspond to either the temperature near the LD 32 or around the LD 32, nothing more.

On page 7 of the Office Action, the motivation asserted in the Office Action to combine the cited references is “as a matter of routine skill in the art and design choice.” Applicants respectfully assert that the Office Action has provided an improper motivation to combine the references as it is set forth that, in a prima facie obviousness case, evidenced motivation must be provided indicating why one skilled in the art would be motivated, lead, or suggested to modify an existing reference in view of another reference. In addition, is also improper to base a rejection on the claimed feature being merely a design choice. See In re Garrett, 1986 Pat. App. LEXIS 8 (Bd. Pat. App. 1986), where the U.S. Patent and Trademark Office Board of Patent Appeals and Interferences (“Board”) specifically stated: “the examiner has not presented any line of reasoning as to why the artisan would have been motivated to so modify the...structure, and we know of none. The examiner’s assertion...that the proposed modification would have been “an obvious matter of engineering design choice well within the level of skill of one of ordinary skill in the art” is q conclusion, rather than a reason.” Similar discussions can be seen in In re Chu, 36 USPQ2d 1089 (Fed. Cir. 1985).

Thus, as demonstrated by the cases cited above, a conclusion of routine skill in the art and design choice is clearly improper where it has not been demonstrated that the prior art provides a motivation for one skilled in the art to make the necessary changes to a reference device. It is respectfully requested that the rejection to the claims be withdrawn.

In item 9, on page 7 of the Action, the Examiner rejected claims 13-20 under 35 USC 103(a) as being unpatentable over Volz and further in view of Eda. This rejection is traversed and reconsideration is requested.

As previously set forth, Stayt fails to teach or suggest, “wherein the reference laser diode is operated at temperatures lower than or equal to an ordinary temperature,” as recited in independent claim 1 and as recited in independent claims 13 and 18. The arguments presented above supporting the patentability of independent claims 13 and 18 in view of Eda are incorporated herein. Thus, Eda and Volz, individually or combined, fail to teach all the claimed features recited in independent claims 13 and 18. Applicants incorporate herewith the arguments presented above arguing for improper motivation to combine the references. Further, similar arguments presented above supporting the patentability of independent claims 1, 9, 13, and 18 are incorporated herewith to support the patentability of independent claims 21, 22, 23,

and 24. It is respectfully requested that the rejection to the claims be withdrawn.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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